

## CERTIFICATE

The attachment of this certificate is a copy of the following patent application submitted to this office:

Filing Date: 2003 10 20

Application No.: 200320117133.4

Type of Invention: Utility Model

Title of the Invention: A Safety Electric Heating Cooker

Applicant: Elec-Tech International Co., Ltd.

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Director of the State Intellectual Property Office

of the People's Republic of China: WANG Jing-chuan

December 24, 2003

## A Safety Electric Heating Cooker

### Technical Field

This utility model relates to a safety electric heating cooker.

### 5 Background of the Utility Model

The outer shells of many kitchen appliances such as electric frying pans, etc. are made of plastics which is not heat-resistant, while the temperature of the cooker bowl for accommodating food is rather high during cooking. If the outer shell is made of common material, it can not withstand for direct contact with the 10 cooker bowl, and it will not pass the safety criterion. If the outer shell is made of heat-resistant material, the production cost will be rather high.

### Summary of the Utility Model

The main object of the present utility model is to provide a safety electric heating cooker, which has a decreased production cost and an increased safety 15 performance.

The aim of the present utility model is achieved by following technical scheme:

The safety electric heating cooker according to the present utility model comprises an outer shell and a cooker bowl, characterized in that, the cooker bowl 20 is supported by the backstops secured on the inner side of the outer shell, whereby air gap is generated between said outer shell and said cooker bowl.

Said backstops may be in the form of a metal ring which is secured on said outer shell. Alternatively, said backstops may be constructed by one or multiple pieces of blocks integrated to said outer shell by twice molding so as to be 25 convenient for assembling. Said blocks may be made of heat-resistant plastics or metal, by which the cooker bowl is supported.

Said backstops are installed on the inner side or at the bottom of the inner side of said outer shell.

Apparently, the backstops according to the present utility model can be used 30 to support hot cooker bowl, such that, larger air gap is generated between said

outer shell and said cooker bowl so as to prevent the non heat-resistant outer shell from being melt.

The present utility model overcomes the shortcomings of the prior art, decreases the production cost and increases the safety performance. The present 5 utility model is applicable to kitchen apparatus such as electric frying pans, electric saucepots, etc.

#### Brief Description of the Drawings

Fig. 1 shows the schematic view of the present utility model;

Fig. 2 is a partial enlarged view of Fig. 1;

10 Fig. 3 is the schematic view illustrating the outer shell with backstops secured thereon.

#### Detailed Description of the Preferred Embodiments

The present utility model will be described in details in combination with Figs. 1–3.

15 As shown in the figures, the safety electric heating cooker according to the present utility model comprises an outer shell and a cooker bowl, characterized in that, the cooker bowl is supported by the backstops secured on the inner side of the outer shell, whereby air gap is generated between said outer shell and said cooker bowl.

20 Said backstops may be in the form of a metal ring (12) which is secured on said outer shell (5). Alternatively, said backstops may be constructed by one or multiple pieces of blocks 11 integrated to said outer shell (5) by twice molding so as to be convenient for assembling. Said blocks may be made of heat-resistant plastics or metal, by which the cooker bowl (2) is supported. Said backstops are 25 installed on the inner side or at the bottom of the inner side of said outer shell.

#### Claims

30 What is claimed is:

1. A safety electric heating cooker comprises an outer shell and a cooker bowl, characterized in that, the cooker bowl is supported by the backstops secured on the inner side of the outer shell, whereby air gap is generated between said outer shell and said cooker bowl.

5       2. A safety electric heating cooker according to claim 1, characterized in that, said backstops may be in the form of a metal ring which is secured on said outer shell.

10      3. A safety electric heating cooker according to claim 1, characterized in that, said backstops may be constructed by one or multiple pieces of blocks integrated to said outer shell by twice molding; said blocks may be made of heat-resistant plastics or metal, by which the cooker bowl is supported.

4. A safety electric heating cooker according to claim 1, characterized in that, said backstops are installed on the inner side or at the bottom of the inner side of said outer shell.

# 证 明

本证明之附件是向本局提交的下列专利申请副本

申 请 日： 2003. 10. 20

申 请 号： 2003201171334

申 请 类 别： 实用新型

发明创造名称： 安全电热锅

申 请 人： 广东德豪润达电气股份有限公司

发明人或设计人： 王冬雷



中华人民共和国  
国家知识产权局局长

王景川

2003 年 12 月 24 日

## 权 利 要 求 书

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- 1、安全电热锅，包括锅体及上盖，其特征在于：固定于外壳体上的支撑体由内侧支撑锅体，在所述外壳体与锅体之间支撑形成空气间隙。
  - 2、根据权利要求 1 所述的安全电热锅，其特征在于：所述支撑体为一个金属圈，此件再固定在外壳体上。
  - 3、根据权利要求 1 所述的安全电热锅，其特征在于：所述支撑体为将一个或多个支撑块通过二次注塑的方式镶嵌在外壳体上，此支撑块可以是耐高温的塑胶件或金属件，通过此件支撑锅体。
  - 4、根据权利要求 1 所述的安全电热锅，其特征在于：所述支撑体设置于外壳体内侧或内侧底部。

# 说 明 书

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## 安全电热锅

### 技术领域

本实用新型涉及一种安全电热锅。

### 背景技术

电炸锅等许多家庭厨房炊具外壳体都是用不耐温的塑料制成的，盛放食物的锅体温度又比较高，普通材料的壳体则无法与之接触，无法通过安全认证。若都用耐高温的材料，成本又很高。

### 实用新型内容

本实用新型的目的是提供一种既节约了成本又提高了产品的安全性的安全电热锅。

本实用新型的上述目的是采用如下技术方案予以实现的：

本实用新型包括锅体及上盖，其特征在于：固定于外壳体内侧的支撑体支撑锅体，在所述外壳体与锅体之间支撑形成空气间隙。

所述支撑体可做一个金属圈，此件再固定在外壳体上。或者，所述支撑体为将一个或多个支撑块通过二次注塑的方式镶嵌在外壳体上做为一个整体以方便装配，此支撑块可以是耐高温的塑胶件或金属件，通过此件支撑锅体。

所述支撑体设置于外壳体内侧或内侧底部。

显然，本实用新型可以用来支撑热的锅体，这样就使外壳体与锅体之间有较大的空气间隙，气流通畅，避免不耐高温的外壳体被熔化。

本实用新型解决了现有技术中存在的问题，既节约了成本又提高了产品的安全性，此实用新型可主要应用在电炸锅、慢炖锅等家庭厨

房炊具上。

#### 附图说明

图 1 为本实用新型结构示意图。

图 2 为图 1 的局部放大图。

图 3 为支撑体镶嵌在外壳体上的结构示意图。

#### 具体实施方式

以下结合图 1—图 3 详述本实用新型。

如图所示：

本实用新型包括锅体及上盖，其特征在于：固定于外壳体内侧的支撑体支撑锅体，在所述外壳体与锅体之间支撑形成空气间隙。

所述支撑体可做一个金属圈（12），此件再固定在外壳体（5）上，或者，所述支撑体为将一个或多个支撑块 11 通过二次注塑的方式镶嵌在外壳体（5）上做为一个整体以方便装配，此支撑块可以是一耐高温的塑胶件或金属件，通过此件支撑锅体（2）。所述支撑体设置于外壳体内侧或内侧底部。

说 明 书 附 图

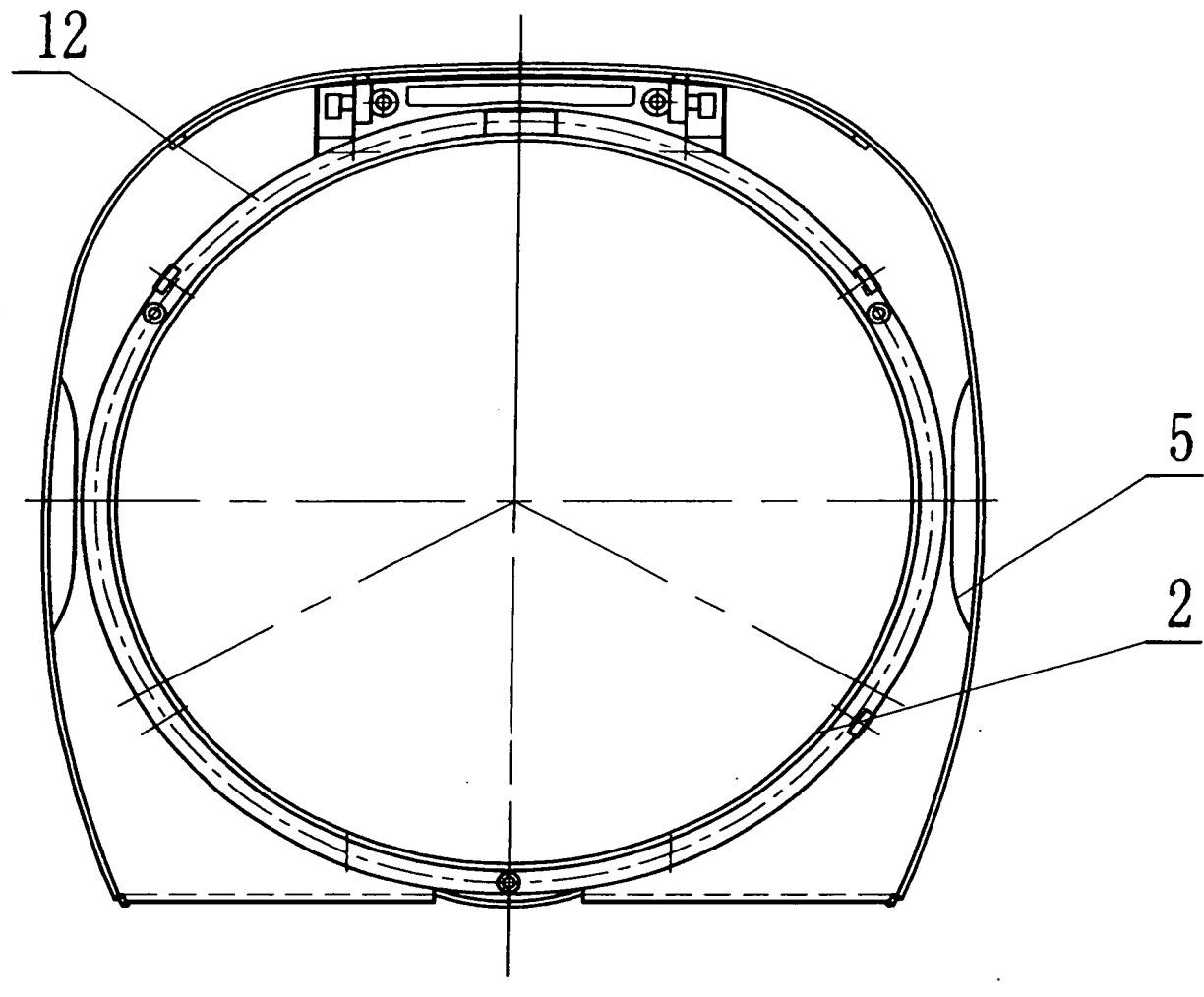


图 1

12

2

5

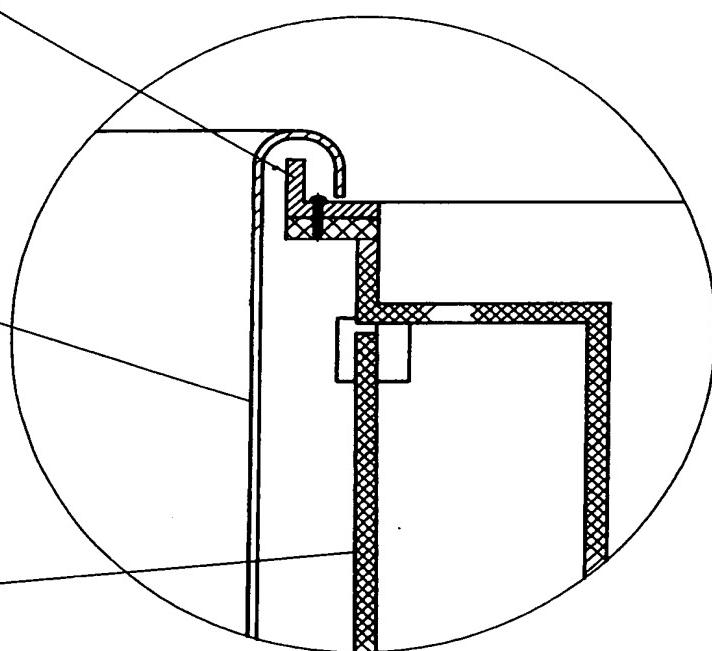


图 2

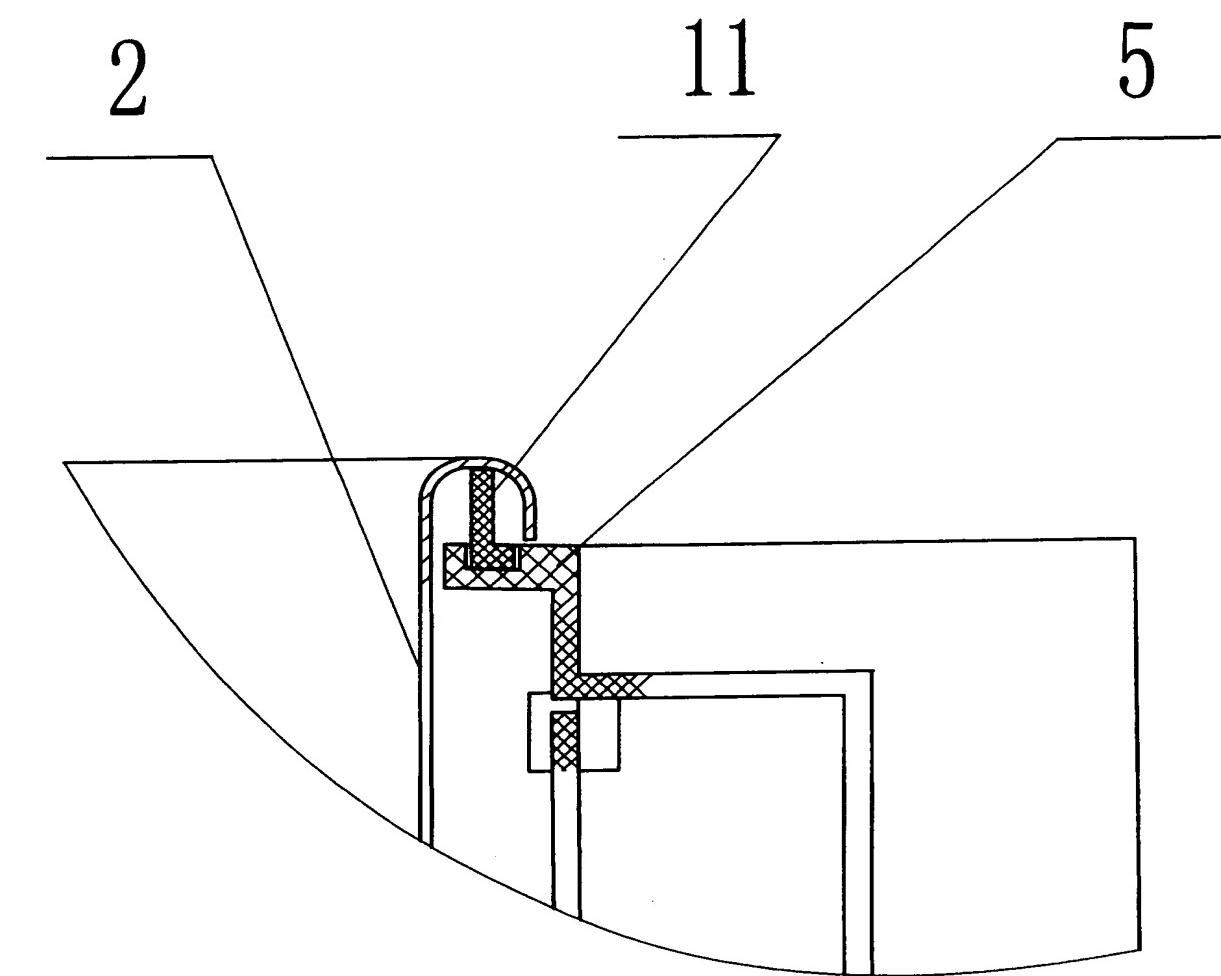


图 3